

FIG. 1

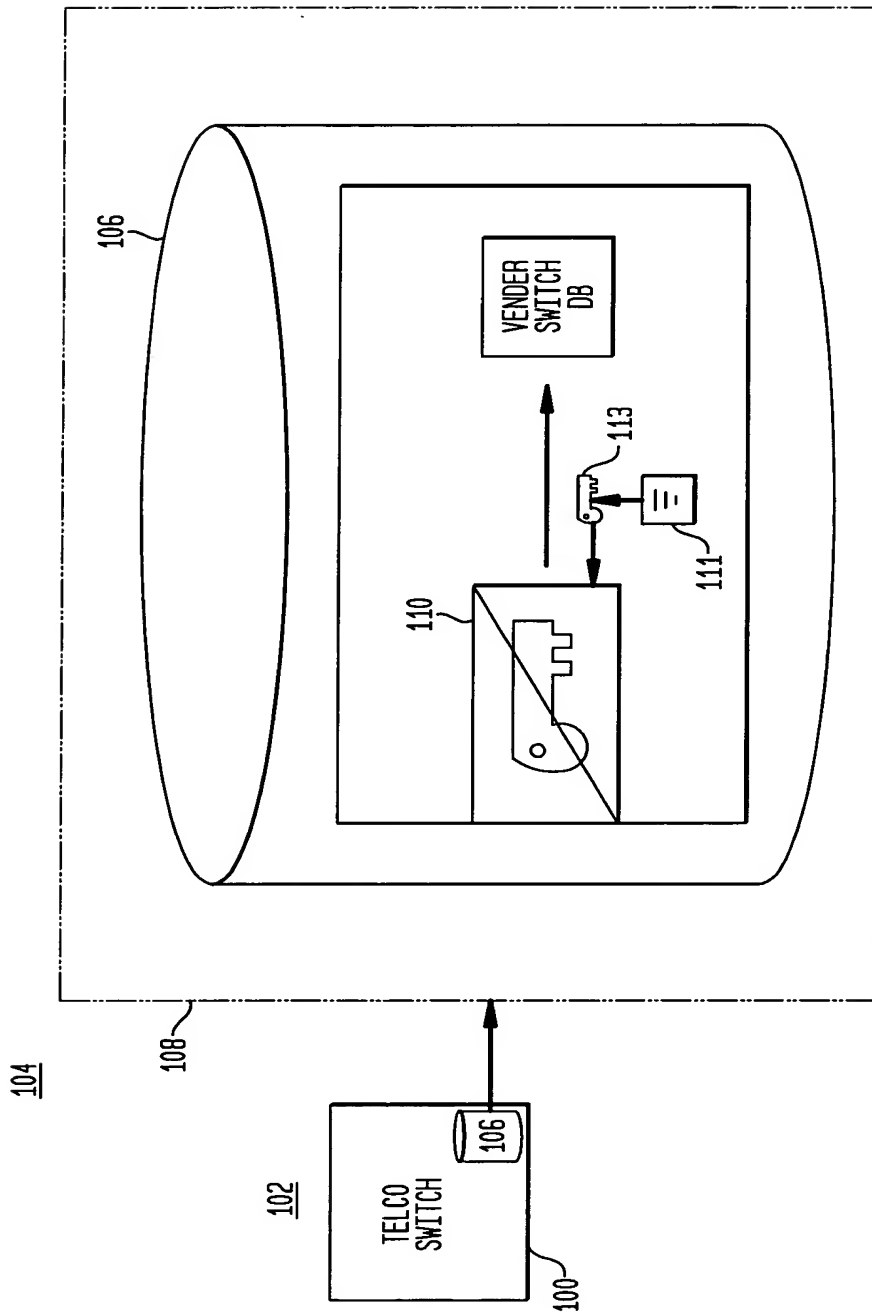


FIG. 2A

procedure 200 for the Telco

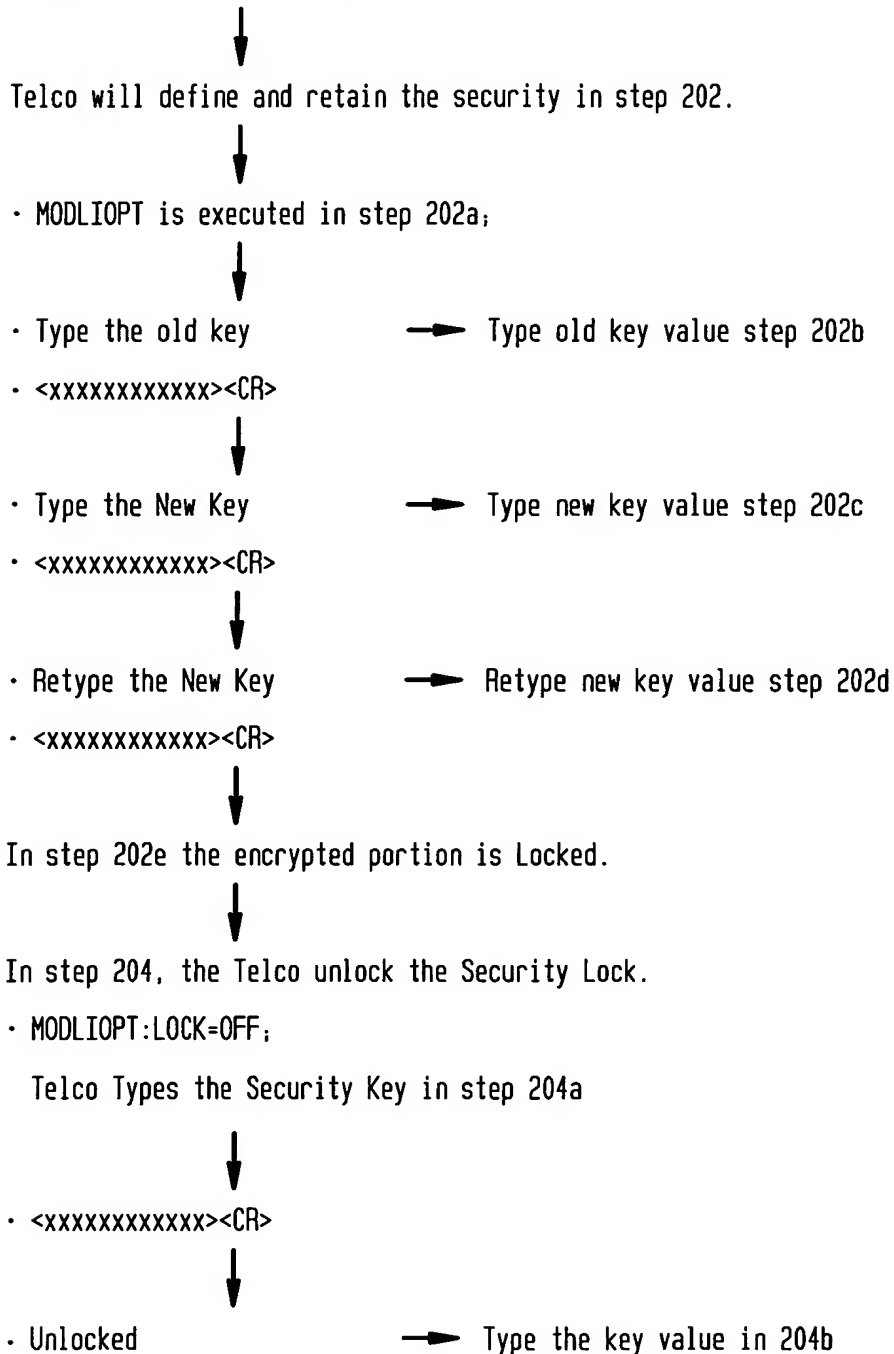


FIG. 2B

In step 206 the Telco unlocks the Security Lock after loading the COPYGEN.



• MODLIOPT:LOCK=OFF;

Type the Security Key in step 206a

• <xxxxxxxxxxxx><CR>

Unlocked



→ Type the key value in step 206b



In step 208 the Telco displays the Lock Status.



• DISPLIOPT;

Locked is displayed

→ if the Security Lock is locked
message is displayed in step 208a



Unlocked is displayed

→ if the Security Lock is unlocked
message is displayed in step 208b



Of course, other parameters that are administered using the MODLIOPT command may be displayed when DISPLIOPT is executed.

FIG. 2C

an emergency procedure provided for the invention in step 210.



The vendor performs an upgrade 210a



authorized personnel are allowed to reset the Security Key to a new value in step 210b



using the default key as the old value in step 210c.



After the Security Key is reset, the authorized personnel enters the surveillance data in step 210d based on backup records, such as from paper or an equivalent recording method.



Telco unlocks the Security Lock in step 212



• MODLIOPT:LOCK=OFF;

Type the Security Key in step 212a

•

• <xxxxxxxxxxxx><CR>



Unlocked



Type the key value in step 212b



Telco may like to make it a practice in their operation procedure to define the Security Key to a new value after a new APS is loaded onto the switch in 212c.

FIG. 3A

The procedures 300 for the vendor are also provided by the invention as shown in Figure 3.



APS Upgrade Procedures for the vendor will now be explained in step 302.



For the first upgrade, there may be no surveillance information present as indicated by step 302a.



In this case, the vendor informs the Telco to define a new Security Key using the default key as the old key value instep 302b.



The vendor informs the Telco to unlock the Security Lock using the Security Key value in step 302c



allow their authorized personnel in step 302d to execute the display commands that cause the data to be displayed. These commands may be, for example, CALEA specific MML commands.

FIG. 3B

In the case that the Vendor provides the security features in step 304,



the vendor informs the Telco in step 304a that the Security Key cannot be lost and cannot be made public.



The Telco is further advised that the Security Key should not be disclosed to even the vendor in step 304b.



The vendor informs the Telco that the only way to recover a lost Security Key is to re-perform the upgrade in step 304c.



In one aspect, the re-upgrade is done without the REGENerated commands. The Telco then defines a new Security Key in step 304d using the default key as the old value and enters the surveillance data based on records.



In step 306, the vendor advisee the Telco to unlock the Security Lock after reloading a COPYGEN.

FIG. 3C

In step 308, the Upgrade Procedures from the vendor side



sequence number of the command is noted in step 308a and to be supplied to the Telco.



The Telco then executes in step 308b the DISPEACMD command to decrypt the MML commands for execution.



IN step 308c, the encrypted CALEA specific MML commands from the log file are executed in the order they are entered into the log-file.